

## Remarks

### *I. Support for the Amendments*

Replacement drawings have been provided for figures 1-5 to comply with the formal requirements for drawings under 37 C.F.R. § 1.84. The replacement drawing for Figure 3 additionally removes measurements presented in a preferred embodiment of the present invention to aid the clarity of the figure. In addition, replacement Figure 3 also corrects the typographical error present in the original Figure 3, wherein the numeral 17 was used to depict multiple items.

The specification has also been amended to reflect the changes made to Figure 3 in the replacement drawings. Furthermore, the specification has been amended to correct typographical errors noted by the Examiner. Support for these amendments can be found in the original specification at pages 8-10 and in the original figures. No new matter enters by way of these amendments.

Claims 1, 2, 7, 8, 11, 17 and 18 have been amended and new claims 23-40 have been added. Support for these amendments can be found in the specification, for example, at page 4, lines 18-23, at page 8, lines 19-21, at page 9, line 3 to page 10, line 2, in the drawings, and in the original claims. No new matter enters by way of these amendments. Upon entry of the foregoing amendments, claims 1-40 will be pending in the application.

### *II. The Objection to the Drawings*

The Examiner has objected to the drawings because “Figs. 1 and 2 have titles which do not appear to be relevant to the current application” and because some reference numerals do not clearly indicate their association with a particular part of the drawing. Office Action at page 2. Applicants have submitted new replacement drawings that correct these informalities. Thus, reconsideration and withdrawal of this objection is respectfully requested.

### ***III. The Objection to the Specification***

The Examiner has objected to the specification for the inclusion of the word “felxographic” on page 8, line 4. Office Action at page 2. Applicants have amended the specification to correct this typographical error. Reconsideration and withdrawal of this objection is respectfully requested.

### ***IV. The Objection to the Claims***

The Examiner has objected to claims 8 and 17 allegedly because “there is no indication which dimension of the gap is 0.020 to 0.125 inch.” To facilitate prosecution, claims 8 and 17 have been amended. Reconsideration and withdrawal of this objection is respectfully requested.

### ***V. The Rejection of Claims 18-22 Under 35 U.S.C. § 112, Second Paragraph***

The Examiner has rejected claims 18-22 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. The Examiner asserts that in claim 18, at line 6, “it is unclear exactly which volume of ink is being referred to by the limitation of ‘said ink.’ ” Office Action at page 3. In order to facilitate prosecution, Applicants have amended claim 18. Reconsideration and withdrawal of this rejection is thus respectfully requested.

### ***VI. The Rejection of Claims 1-2, 4, 6-11, 13, 15-18 and 22 Under 35 U.S.C. § 103***

Claims 1-2, 4, 6-11, 13, 15-18 and 22 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent No. 5,826,509 to Deneka in view of U.S. Patent No. 3,333,535 to Behringer. Applicants respectfully disagree and traverse this rejection.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There must also be a reasonable expectation of success. *See* M.P.E.P. §2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicants’ disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

In a proper obviousness determination, the changes from the prior art must be evaluated in terms of the whole invention, including whether the prior art provides any teaching or suggestion to one of ordinary skill in the art to make the changes that would produce the claimed invention. *See, e.g., In re Chu*, 36 U.S.P.Q.2d 1089, 1094 (Fed. Cir. 1995). This includes what could be characterized as simple changes. *See, e.g., In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (Although a prior art device could have been turned upside down, that did not make the modification obvious unless the prior art fairly suggested the desirability of turning the device upside down).

Only when the prior art teaches or suggests the claimed invention does the burden fall on the applicant to rebut that *prima facie* case. *See In re Dillon*, 16 U.S.P.Q.2d 1897, 1901 (Fed. Cir. 1990) (in banc), *cert. denied*, 500 U.S. 904 (1991). However, a *prima facie* case of obviousness may be rebutted by showing that the art, in any material respect, teaches away from the claimed invention.

With respect to claims 1 and 2, and their dependents, the Examiner contends that Deneka teaches a doctor blade assembly comprising an upper blade positioned to provide contact with an anilox roll, an ink chamber positioned below the upper blade, and a lower blade. Office Action at page 3. The Examiner admits that Deneka does not teach a gap positioned between the lower blade and the anilox roll, but argues that Behringer shows such a gap and therefore it would have been obvious “to use the doctor blade assembly structure of Behringer with the printing system of Deneka in order to be able to more consistently transfer ink to the anilox roll.” *Id.* at page 4. This is not correct.

The Examiner has not met the burden to establish a *prima facie* case of obviousness. The mere fact that references can be modified does not render the resultant modification obvious unless the prior art also suggests the desirability of the modification. M.P.E.P. § 2143.01; *In re Mills*, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990); *see also, In re Fritch*, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). This includes what could be characterized as simple changes. *See Gordon*, 221 U.S.P.Q. at 1127. Even changes that are allegedly “merely a matter of engineering design choice” require a suggestion of desirability in the prior art. *See In re Kuhle*, 188 U.S.P.Q. 7, 9 (C.C.P.A. 1975).

Rather, the Federal Circuit has held that a proper analysis under Section 103 requires a consideration of “whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process.” *In re Vaeck*, 947 F.2d 488. In the present case, there is no art-based suggestion to combine the teachings of these different references, and their combination is improper. Deneka contains no such suggestion to achieve the modification achieved by Applicants. To the contrary, Deneka teaches away from the gap of the present invention by suggesting that the flexible doctor blades “when properly positioned contact the engraved surface 21 of the coating cylinder 20 over substantially its entire length.” Col. 4, ll. 4-6 (emphasis added). Whatever else Deneka teaches, it does not teach or suggest the desirability of a gap used in conjunction with an ink chamber to meter delivery of ink to anilox cells in a doctor blade assembly.

Even assuming *inter alia* that there were such a suggestion, one skilled in the art would still not arrive at Applicants’ claimed invention. The deficiencies of Deneka are not cured by Behringer. Hence, the cited references taken alone or in combination, do not teach or suggest the present invention.

The Examiner contends that Behringer shows an ink chamber positioned below the upper blade and a gap between the lower blade and the roller to allow ink to be drawn into and expelled from the chamber. Office Action at page 4. For support, the Examiner cites to Col. 5, ll. 6-8. However, a reading of this text, and perusal of Figure 5, reveal that the ink confining chamber of Behringer is not positioned below the upper blade 100, but rather surrounds the ink tray 52 and virtually the entire anilox roll to prevent spillage. Thus, the gap in Behringer does not allow ink to be drawn into or expelled from the ink chamber. Rather, the deflector blade 58 of Behringer, acts only to remove excess ink from the plate cylinder. Col. 4, l. 28 to col. 5, l. 12. Thus, Behringer does not disclose a gap that would allow ink to be drawn into and expelled from an ink chamber.

The same arguments apply with respect to independent claims 9 and 18. With respect to claim 9 and its dependents, the Examiner argues that Deneka discloses all of the limitations of claim 9 except for the gap means recited in the claim. See Office Action at pages 4-5. The Examiner asserts that “Behringer teaches an ink chamber means having a gap means for

increasing volume in the ink chamber means and for allowing ink to be expelled from the ink chamber means.” *Id.* at page 5. However, as discussed above, the ink chamber means referred to by the Examiner in Behringer surrounds the ink tray 52 and virtually the entire anilox roll. Thus, the gap disclosed in Behringer would not function for increasing volume in an ink chamber and would not allow for ink to be expelled from the ink chamber.

With respect to claim 18 and its dependents, the Examiner admits that Deneka does not teach the step of carrying ink on the anilox roll from an ink supply through a gap, but argues that Behringer teaches a method of applying ink from an ink supply and carrying it through a gap into an ink chamber. However, as discussed above, Behringer discloses no such method.

For at least these reasons, the Examiner’s conclusion of obviousness is based on improper hindsight reasoning. No suggestion to modify the cited references has been found in the references themselves or pointed out to Applicants from the general knowledge of one of ordinary skill in the art. Nor has the Examiner demonstrated that even if it were proper to combine these references that they would teach or suggest Applicants’ invention. Should the Office maintain its obvious rejection based on Deneka in view of Behringer, Applicants respectfully request that the Office provide evidence supporting its interpretation of these references pursuant to 37 C.F.R. § 1.104(d)(2).

In view of the above, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness, as required by 35 U.S.C. § 103. As such, withdrawal of this rejection is respectfully requested.

## **VII. *The Rejection of Claims 3, 12 and 19-21 Under 35 U.S.C. § 103***

The Examiner has rejected claims 3, 12 and 19-21 for allegedly “being unpatentable over Deneka and Behringer as applied to claims 1-2, 4, 6-11, 13, 15-18 and 22 above, and further in view of U.S. Patent No. 5,168,806 to Reder et al.” Office Action at page 7. Applicants respectfully disagree and traverse this rejection.

The cited references, taken alone or in combination, do not teach or suggest to one of ordinary skill in the art the invention described in claims 3, 12 and 19-21 of Applicants’ invention. Nor is there any art-based suggestion to combine the teachings of these different

references, and their combination is improper. As discussed above, Deneka explicitly teaches away from the presence of a gap in conjunction with an ink chamber. Col. 4, ll. 4-6.

Even assuming there were such a suggestion to combine these references, or that their combination was proper, neither Behringer nor Reder, taken alone or in combination, can supply what Deneka lacks. As discussed above, Behringer does not teach a gap that allows ink to be drawn into or expelled from an ink chamber. Reder only discloses a gap out of which ink is expelled, but does not disclose the use of a gap to bring ink into an ink chamber. *See* Col. 2, ll. 51-54 and col. 4, l. 62 to col. 5, l. 1.

Therefore, for at least these reasons, the Examiner's conclusion of obviousness is based on improper hindsight reasoning. No suggestion to modify the cited references has been found in the references themselves or pointed out to Applicants from the general knowledge of one of ordinary skill in the art. Nor has the Examiner demonstrated that even if it were proper to combine these references that they would teach or suggest Applicants' invention. Should the Office maintain its obvious rejection based on Deneka in view of Behringer and Reder, Applicants respectfully request that the Office provide evidence supporting its interpretation of these references pursuant to 37 C.F.R. § 104(d)(2).

In view of the above, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness, as required by 35 U.S.C. § 103. As such, withdrawal of this rejection is respectfully requested.

#### ***VIII. The Rejection of Claims 5 and 14 Under 35 U.S.C. § 103***

The Examiner has rejected claims 5 and 14 for allegedly "being unpatentable over Deneka and Behringer as applied to claims 1-2, 4, 6-11, 13, 15-18 and 22 above, and further in view of U.S. Patent No. 4,432,282 to Jurinak." Office Action at page 8. Applicants respectfully disagree and traverse this rejection.

The cited references, taken alone or in combination, do not teach or suggest to one of ordinary skill in the art the invention described in claims 5 and 14 of Applicants' invention. Nor is there any art-based suggestion to combine the teachings of these different references, and

their combination is improper. As discussed above, Deneka explicitly teaches away from the presence of a gap in conjunction with an ink chamber. Col. 4, ll. 4-6.

Even assuming there were such a suggestion to combine these references, or that their combination was proper, neither Behringer nor Jurinak, taken alone or in combination, can supply what Deneka lacks. As previously discussed, Behringer does not teach a gap that allows ink to be drawn into or expelled from an ink chamber. Jurinak discloses a system in which only one doctor blade is present and does not disclose either an ink chamber or a gap.

Therefore, for at least these reasons, the Examiner's conclusion of obviousness is based on improper hindsight reasoning. No suggestion to modify the cited references has been found in the references themselves or pointed out to Applicants from the general knowledge of one of ordinary skill in the art. Nor has the Examiner demonstrated that even if it were proper to combine these references that they would teach or suggest Applicants' invention. Should the Office maintain its obvious rejection based on Deneka in view of Behringer and Jurinak, Applicants respectfully request that the Office provide evidence supporting its interpretation of these references pursuant to 37 C.F.R. § 104(d)(2).

In view of the above, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness, as required by 35 U.S.C. § 103. As such, withdrawal of this rejection is respectfully requested.

## Conclusion

In view of the foregoing arguments and amendments, each of the presently pending claims is believed to be in immediate condition for allowance. All of the stated grounds of rejection have been traversed, accommodated, or rendered moot. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. The Examiner is encouraged to contact the undersigned at 202.942.5243 should any additional information be necessary for allowance.

Respectfully submitted,



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